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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,754	09/08/2000	Mark Gonikberg	1005-0020	3170

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EXAMINER

LUGO, DAVID B

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/658,754

Applicant(s)

GONIKBERG, MARK

Examiner

David B. Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 13-19, 21, 22, 24-29, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) 6, 10-12, 20, 23, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Regarding the information disclosure statement filed 2/5/01, ITU-T Recommendation G.992.2 has not been considered as a copy was not available to the Examiner.

Claim Objections

2. Claims 7 and 31 are objected to because of the following informalities:
 - a. Claim 7, line 3, "device one of" should be --device is one of--.
 - b. Claim 31 should depend from claim 30.
 - c. Claim 31, line 2, "duration" should be --the duration--.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7⁹, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bremer et al. U.S. Patent 5,311,578.

5. Regarding claim 1, Bremer et al. teach a technique for automatic identification of a remote modem by evaluating the frequency characteristics of signals sent by a remote modem to a local device as it is determined whether an answerback tone is detected (Fig. 5 – step 505), wherein if the answerback tone is detected, the frequency characteristics of the received signal are compared to the characteristics of a particular modem type by determining whether a low-level identification tone is included with the answer tone (steps 510, 530).

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6. Regarding claims 2 and 3, if the low-level tones are identified, the remote modem is characterized as a particular type of modem (col. 5, lines 41-47).

7. Regarding claim 4, the remote identification process occurs during the establishment of a data connection between the local and remote modems, which includes establishing the level of connection and baud rate supported by the communication channel (col. 1, lines 10-37).

8. Regarding claim 5, identification of the modem type as the same type as the local device will allow for additional features desired by the customer that are considered to enhance communication between the devices (col. 1, lines 42-64).

9. Regarding claim 7, the remote device is one of an analog modem and a digital modem.

10. Regarding claim 9, identification of the modem type as the same type as the local device will allow for additional features desired by the customer that are considered to enhance performance (col. 1, lines 42-64).

11. Regarding claim 13, Bremer et al. teach an apparatus for automatic identification of a remote modem by evaluating the frequency characteristics of signals sent by a remote modem to a local device as it is determined whether an answerback tone is detected (Fig. 5 – step 505), wherein if the answerback tone is detected, the frequency characteristics of the received signal are compared to the characteristics of a particular modem type by determining whether a low-level identification tone is included with the answer tone (steps 510, 530).

12. Regarding claims 14 and 15, identification of the modem type as the same type as the local device will allow for additional features desired by the customer that are considered to enhance communication between the devices (col. 1, lines 42-64).

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13. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Maxwell U.S. Patent 4,215,243.

14. Regarding claim 13, Maxwell teaches an apparatus in Figure 1 for identifying a particular modem type from a plurality of different modems by evaluating the frequency of the signals sent by a remote device to the apparatus, and comparing the evaluated frequency to known frequency characteristics to determine the identity of the remote communication device (see col. 4, line 13 to col. 5, line 13).

15. Claims 13-15, 24-29 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Amundson U.S. Patent 4,680,773.

16. Regarding claims 13 and 24, Amundson teaches a communications system utilizing a multi-mode modem where the modem 13 measures a parameter associated with signals sent by a remote device by sampling received characters, and compares the sampled characters to determine if the character necessary for initiating a matched-protocol link is detected (col. 6, lines 1-5). The modem inherently contains a storage element containing the character necessary for initiating the matched-protocol link in the comparison.

17. Regarding claims 14, 15 and 25, the modem provides optimized data transmission and error correction when operating the special matched-protocol mode (col. 3, lines 21-30).

18. Regarding claim 26, the remote modem is identified as a modem supporting the matched-protocol mode.

19. Regarding claim 27, the signals are sent during training or initialization of the transceiver (col. 5, lines 50-68).

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20. Regarding claim 28, the one or more parameters is the presence of the character necessary for initiating the matched-protocol link.

21. Regarding claim 29, the device is a modem 13.

22. Regarding claim 33, the modem comprises a general purpose processor 18 (Fig. 2).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bremer et al.

25. Regarding claim 8, Bremer et al. teach a technique for automatic identification of a remote modem as described above, but do not disclose that communication is performed in accordance with ITU-T Recommendation V.90. However, it would have been obvious to one of ordinary skill in the art to use the identification method of Bremer et al. in a modem system complying with ITU-T Recommendation V.90 in order to utilize non-industry standard features, as taught by Bremer et al. (col. 1, lines 56-60).

26. Claims 16-19, 21, 22 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amundson.

27. Regarding claim 16, Amundson teaches a communications system utilizing a multi-mode modem where the modem 13 measures a parameter associated with signals sent by a remote device by sampling received characters, and compares the sampled characters to determine if the character necessary for initiating a matched-protocol link is detected (col. 6, lines 1-5).

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28. Amundson does not disclose that the steps performed are implemented via instruction sequences stored on computer readable storage medium. However, it is well known in the art to store information in computer readable storage media for execution by a processor. It would have been obvious to one of ordinary skill in the art to store information in an information storage media to implement the method disclosed by Amundson because a software implementation reduces the need for application specific hardware and allows for changes to be easily implemented without the need for additional hardware.

29. Regarding claim 17, the remote modem is identified as a modem supporting the matched-protocol mode.

30. Regarding claim 18, selection of the computer readable medium to be one of a magnetic, optical or electronic storage medium is deemed a design consideration that fails to patentably distinguish over the prior art of record.

31. Regarding claims 19 and 22, the modem provides optimized data transmission and error correction when operating the special matched-protocol mode (col. 3, lines 21-30).

32. Regarding claim 21, the computer program is considered to be executable on a device having communication capability coupled to the remote communication device.

33. Regarding claim 32, Amundson teaches a communications system utilizing a modem as discussed above, but does not disclose that the modem is disposed on a single integrated circuit.

34. However, it is well known to implement circuitry on a single integrated circuit to conserve space. Therefore, it would have been obvious to one of ordinary skill in the art to implement the modem of Amundson on a single integrated circuit to conserve space.

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Allowable Subject Matter

35. Claims 6, 10-12, 20, 23, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David B. Lugo** whose telephone number is **(703) 305-0954**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

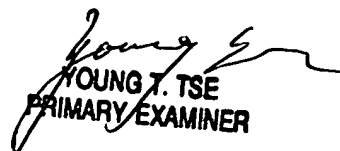
or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dbl
11/20/03


YOUNG T. TSE
PRIMARY EXAMINER